REMARKS

Claims 1 – 61 are pending in the present application. Claims 24 - 61 have been cancelled, Claims 1, 3, 4, 7, 8, and 22 have been amended, and Claims 62 – 80 have been added, leaving Claims 1 - 23 and 62 - 80 for consideration upon entry of the present Amendment. The Specification has been amended to correct certain typographical errors, as explained in detail below. No new matter has been introduced by these amendments. Reconsideration and allowance of the claims is respectfully requested in view of the above amendments and the following remarks.

IDS Submission

Applicants submitted an information disclosure statement on October 15, 2001. The Examiner has not returned a signed copy of the PTO-1449 form acknowledging that the Examiner has considered the art contained therein. Applicants respectfully request that the Examiner consider the art from the October 15, 2001 information disclosure statement and provide Applicants with a signed copy of the PTO-1449 form.

Claim Rejections Under 35 U.S.C. § 112, First Paragraph

Claims 1 – 23 stand rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 1, 3, 7, 8, and 22 have been amended to correct typographical errors, dependency, and/or to ensure consistency of language. These amendments, which address the issues raised in the Office Action, do not narrow the scope of the present claims. Reconsideration and withdrawal of this rejection are respectfully requested.

Claim Rejections Under 35 U.S.C. § 103(a)

Claims 1 – 10 and 19 – 23 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over U.S. Patent No. 6,146,558 to Feist et al. in view of Japanese Patent Abstract, No. 1-153263 to Tokuo et al. Applicants respectfully traverse this rejection.

Feist et al. is directed to a method for molding optical disks comprising injecting molten thermoplastic material into the mold, cooling to below the glass transition temperature of the

thermoplastic material, and removing the thermoplastic disk from the mold. (Abstract) Feist discusses that a sheet or film, to be useful for managing heat transfer, it must have a very smooth surface, and preferably have a compliant surface to attenuate minor imperfections in the molding tool. (Col. 1 line 62 - Col. 2, line 2) Feist et al., to attain improved surface replication, teach applying a thermally insulative insert coating to a mold insert. (Col. 2, lines 8 - 25)

Tokuo et al. is directed to a device for polishing the back of a stamper while the stamper is left in intimate contact with a glass substrate. The abstract does not discuss a managed heat transfer layer, processing of a managed heat transfer layer, of a location of a managed heat transfer layer. The abstract further fails to discuss injecting molten plastic, cooling the plastic, or releasing the plastic article from the mold.

For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness, i.e., that all elements of the invention are disclosed in the prior art; that the prior art relied upon, coupled with knowledge generally available in the art at the time of the invention, contain some suggestion or incentive that would have motivated the skilled artisan to modify a reference or combined references; and that the proposed modification of the prior art had a reasonable expectation of success, determined from the vantage point of the skilled artisan at the time the invention was make. In re Fine, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988); In Re Wilson, 165 U.S.P.Q. 494, 496 (C.C.P.A. 1970); Amgen v. Chugai Pharmaceuticals Co., 927 U.S.P.Q.2d, 1016, 1023 (Fed. Cir. 1996).

In the Office Action, it is admitted that Feist et al. fail to disclose "chemically or physically altering the insert layer after it has been formulated." (Paper 8, page 3) Additionally, Tokuo et al. are relied upon to disclose "grinding or lapping the rear surface of a stamper to ensure that the stamper has a uniform thickness". (Paper 8, page 3) These references, however also fail to provide any motivation to combine. It is not what someone could do with these references, but what one of ordinary skill in the art would be motivated to do with an expectation of success, based upon the teachings of the references. Tokuo et al. is directed to "polishing the "back of a stamper... as the stamper is left in intimate contact with a glass substrate". Feist et al. do not have a glass substrate, and do not discuss any need or desire to polish the back of their substrate while their thermoplastic disk is in place. There is further no motivation to polish the

insert in stead of the stamper. Therefore, these references fail to provide the requisite motivation and expectation of success to establish a *prima facie* case of obviousness.

It is also noted, that even combined these references fail to teach the claims. If the polishing teaching of Tokuo et al. was even included in the teaching of Feist et al., Feist would be polishing the back of the stamper (no motivation) with the thermoplastic disk in place (no expectation of success), and still would fail to alter the exposed surface of a managed heat transfer layer as claimed in the present application. As such, the present claims are non-obvious in view of Feist et al., Tokuo et al., both alone and in combination.

It is further noted the dependent claims add additional patentably distinct features. For example, Tokuo et al. further fails to in any way mention chemically altering a surface. Hence, Claim 8 is further non-obvious. Another example of novelty is a managed heat transfer layer with an altered surface and an area of roughness, wherein the roughness is about 0.20 to about 0.40 micrometers.

Claims 1 - 10 and 19 - 23 are non-obvious in view of Feist et al., and Tokuo et al, alone and in combination. Reconsideration and withdrawal of this rejection are respectfully requested.

Claims 11 – 18 stand rejected under 35 U.S.C. § 103(a), as allegedly unpatentable over Feist et al. in view of Tokuo et al., and U.S. Patent No. 6,099,287 to Higashida et al. Applicants respectfully traverse this rejection.

Higashida et al. is directed to a stamper protecting layer for optical disk molding apparatus. The protecting layer is interposed between a mold and a stamper so that forces generated by extension of and shrinkage of the stamper is adsorbed by the stamper protecting layer. (Abstract) This layer can have a layer of fatty acid on the contact surface of the stamper. (Col. 6, lines 23 – 44)

Higashida et al. is relied upon to teach the lubricant on the exposed surface of the managed heat transfer layer. However, Higashida et al. fails to remedy the deficiencies of Feist et al., and Tokuo et al. discussed in detail above. Higashida et al. at least fails to provide the motivation or expectation of success for modifying Feist et al. by polishing the back of the stamper, and to provide motivation or expectation of success to modify Feist et al. to chemically and/or mechanically alter the exposed surface of a managed heat transfer layer. For at least these

reasons, and since Claims 11 - 18 depend from Claim 1 and include all of the limitations thereof, these claims are none obvious in view of Higashida et al., Feist et al., and Tokuo et al., alone and in combination. Reconsideration and withdrawal of the rejection are respectfully requested.

CANTOR COLBURN: L

New Claims

Claims 62 - 80 have been added to further claim the invention, namely to separate the Markush group set forth in original Claim 1. Support for these new claims can at least be found in original Claims 1 - 20.

It is believed that the foregoing amendments and remarks fully comply with the Office Action and that the claims herein are allowable to Applicants. Accordingly, reconsideration and withdrawal of the rejections and allowance of the case are requested.

If there are any additional charges with respect to this Amendment or otherwise, please charge them to Deposit Account No. 06-1130.

Respectfully submitted,

CANTOR COLBURN LLP

Pamela Y. Curbelo Registration No. 34,676

Customer No. 23413

CANTOR COLBURN LLP
55 Griffin Road South
Bloomfield, CT 06002

Telephone (860) 286-2929 Facsimile (860) 286-0115

Date: February 9, 2004